☐ 1: Science 1981 Dec 11;214(4526):1246-8

High levels of intracellular bombesin characterize human small-cell lung carcinoma.

Moody TW, Pert CB, Gazdar AF, Carney DN, Minna JD.

"Small cells" or "oat cells" characterize a virulent form of lung cancer and share many biochemical properties with peptide-secreting neurones. The neuropeptide bombesin is present in all small-cell lines examined, but not in other lung cancer cell lines, suggesting that bombesinergic precursor cells in lung may give rise to this disease.

PMID: 6272398 [PubMed - indexed for MEDLINE]

Targeting growth factor receptors with fusion toxins.

Kreitman RJ, FitzGerald D, Pastan I.

Laboratory of Molecular Biology, National Cancer Institute, National Institutes of Health, Bethesda, MD 20892.

Recombinant toxins which bind to growth factor receptors have been prepared and used to kill cells responsible for malignant or autoimmune disease. Our strategy has been to genetically fuse ligands to different forms of Pseudomonas exotoxin which due to mutations or deletions do not bind to normal cells. The resulting recombinant chimeric toxins, in concentrations often less than 1 ng/ml, selectively kill cells expressing the appropriate growth factor receptor. The ligand may be a growth factor, such as transforming growth factor alpha (TGF alpha), interleukin 6 (IL6) or interleukin 2 (IL2), or single chain antigen binding proteins, such as the variable heavy and light regions of the monoclonal antibody anti-Tac. These chimeric toxins kill not only established cell lines but also fresh tumor cells from patients and display anti-tumor activity toward human malignant tumors in nude mice. While clinical trials are beginning with some of these agents, work continues to improve the effectiveness of recombinant chimeric toxins, and to widen the scope of disorders which might be treated by this approach.

Publication Types:
- Review
- Review, Tutorial

PMID: 1319965 [PubMed - indexed for MEDLINE]

A chimeric IL-2/Ig molecule possesses the functional activity of both proteins.

Landolfi NF.

Protein Design Labs, Inc., Mountain View, CA 94043.

An expression vector (pIL-2/IgG1) was constructed with the coding sequence of human IL-2 inserted upstream of the four exons (CH1, hinge, CH2, and CH3) that encode the human IgG1 H chain constant region. Introduction of this vector into a nonsecreting murine myeloma cell line resulted in the production of a chimeric molecule (IL-2/IgG1) consisting of IL-2 attached to the three Ig constant region domains. This molecule was secreted by the transfectant as a homodimer. Functional characterization revealed that the IL-2/IgG1 chimeric molecule exhibited the binding and proliferation-mediating activities of IL-2. On a per molecule basis, IL-2/IgG1 was indistinguishable from human rIL-2 in the ability to induce the proliferation of an IL-2-dependent T cell line. This chimeric molecule also possesses Ig effector function, in that it can mediate the specific lysis of IL-2R-positive cells in the presence of complement. These results demonstrate that it is possible to maintain Ig effector function in molecules ("immunoligands") in which the binding specificity is conferred not by Ig variable regions, but rather, by a ligand of choice.

PMID: 1988502 [PubMed - indexed for MEDLINE]

☐ 1: Cancer Immunol Immunother 1993 Nov;37 (6):400-7

Local antitumour treatment in carcinoma patients with bispecific-monoclonal-antibody-redirected T cells.

Kroesen BJ, ter Haar A, Spakman H, Willemse P, Sleijfer DT, de Vries EG, Mulder NH, Berendsen HH, Limburg PC, The TH, et al.

Department of Clinical Immunology, University Hospital Groningen, The Netherlands.

In a pilot clinical study carcinoma patients with malignant ascites or pleural exudates have been treated locally with autologous lymphocytes activated ex vivo and redirected towards tumour cells with bispecific monoclonal antibodies. BIS-1, the bispecific monoclonal antibody used in this study, combines specificity against a tumour-associated antigen, AMOC-31, present on carcinomas, with a specificity against the CD3 complex on T lymphocytes. Patients selected for treatment had malignant pleural or peritoneal effusions. Treatment consisted of isolating autologous peripheral blood lymphocytes, ex vivo activation, incubation with bispecific monoclonal antibodies and injection at the effusion site of these BIS-1-redirected lymphocytes. To evaluate the effects of the bispecific monoclonal antibody, five patients received treatments with activated lymphocytes without bispecific antibodies. Effusion samples taken before and at various times after treatment were analysed by immunocytology and for the presence of the soluble factors carcinoembryonic antigen (CEA), interleukin-6 (IL-6), tumour necrosis factor (TNF), C-reactive protein and soluble CD8. In this way both immune activation and anti-tumour activity could be monitored. Conjugate formation between tumour cells and activated lymphocytes was seen as soon as 4 h after injection of BIS-1-redirected activated lymphocytes, followed by a disappearance or reduction of tumour cells after 24-48 h. In parallel with this, the soluble tumour marker CEA decreased in the effusion fluid following injection with the BIS-1-redirected lymphocytes. Furthermore, a steep increase in local granulocyte numbers was observed in the effusion fluid, which reached a maximum 24-48 h after the start of the treatment. Also levels of IL-6 and TNF were greatly elevated. The data suggest that the treatment induces both antitumour activity and a strong local inflammatory reaction. This is accompanied by no or only minor local and systemic toxicity, i.e. mild

fever, which disappeared as the local inflammatory reaction diminished 48-72 h after treatment.

PMID: 7902211 [PubMed - indexed for MEDLINE]

1: J Immunol 1992 Sep 15;149(6):1840-6

Heterodimeric complex formation with CD8 and TCR by bispecific antibody sustains paracrine IL-2-dependent growth of CD3+ CD8+ T cells.

De Lau WB, Boom SE, Heije K, Griffioen AW, Braakman E, Bolhuis RL, Tax WJ, Clevers H, Bast BJ.

Department of Clinical Immunology, University Hospital, Utrecht, The Netherlands.

During physiologic activation of mature CD8+ T cells, TCR and CD8 bind to the same Ag-complexed MHC class I molecule. Thereby, close proximity is induced between CD8 and the TCR/CD3 complex. During this engagement, CD8 may deliver TCR-independent signals via its associated protein tyrosine kinase, p56lck. We studied the potential biologic effects of close association between CD8 and TCR/CD3 complexes by using a bispecific antibody (bsAb) directed against both TCR and CD8 molecules. This hybrid hybridoma (quadroma)-produced bsAb binds as a monomeric molecule to CD3+ CD8+ but not CD3+ CD4+ T cells. The bsAb proved capable of inducing the cytotoxic effector function of cloned CD3+ CD8+ T cells but not of CD3+ CD4+ T cells. When the bsAb was presented to resting T cells by monocytes, proliferation of the CD3+ CD4+ but not the CD3+ CD8+ subset of T lymphocytes was induced. Parental anti-TCR antibody induced vigorous growth of cells of both subsets. Essentially identical results were obtained when bsAb was presented in an immobilized fashion. The unresponsiveness of the CD3+ CD8+ T cells with respect to mitogenesis could be restored by exogenous rIL-2. The data suggest that bsAb-induced activation differs from activation by monospecific anti-TCR antibody. The former appears to more closely mimic physiologic Ag-induced signaling, because it leads to a similar paracrine IL-2-dependent growth pattern. The bsAb may, therefore, be instrumental in studying T cell signaling pathways, in particular the role of CD8-associated p56lck therein.

PMID: 1387662 [PubMed - indexed for MEDLINE]

☐ 1: Br J Cancer 1996 Sep;74(6):853-62

Targeted inhibition of tumour cell growth by a bispecific single-chain toxin containing an antibody domain and TGF alpha.

Schmidt M, Wels W.

Institute for Experimental Cancer Research, Freiburg, Germany.

Overexpression of the epidermal growth factor receptor (EGFR) and ErbB-2 has been observed in a variety of human tumours, making these receptors promising targets for directed tumour therapy. Since many tumour cells express both ErbB-2 and EGFR and these receptors synergise in cellular transformation, therapeutic reagents simultaneously binding to ErbB-2 and EGFR might offer advantages for tumour therapy. We have previously described the potent anti-tumoral activity of a bispecific antibody toxin that contains ErbB-2- and EGFR-specific single-chain Fv (scFv) domains. Here we report the construction and functional characterisation of a novel bispecific recombinant toxin, scFv(FRP5)-TGF alpha-ETA. The fusion protein consists of the antigen-binding domain of the ErbB-2-specific MAb, FRP5, and the natural EGFR ligand, TGF alpha, inserted at different positions in truncated Pseudomonas exotoxin A. ScFv(FRP5)-TGF alpha-ETA protein displayed binding to EGFR and ErbB-2, thereby inducing activation of the receptors, which was dependent on the cellular context and the level of EGFR and ErbB-2 expression. The bispecific molecule was cytotoxic in vitro for tumour cells expressing various levels of the target receptors. In vivo scFv(FRP5)-TGF alpha-ETA potently inhibited the growth of established A431 tumour xenografts in nude mice.

PMID: 8826849 [PubMed - indexed for MEDLINE]

☐ 1: J Immunol 1998 Feb 15;160(4):1677-86 Related Articles, NEW Books, LinkOut

FREE full text article at www.jimmunol.org

Bispecific molecules directed to the Fc receptor for IgA (Fc alpha RI, CD89) and tumor antigens efficiently promote cell-mediated cytotoxicity of tumor targets in whole blood.

Deo YM, Sundarapandiyan K, Keler T, Wallace PK, Graziano RF.

Medarex, Inc., Annandale, NJ 08801, USA. yashdeo@injersey.com

The FcR for IgA (Fc alpha RI, CD89) is primarily expressed on cytotoxic immune effector cells. By chemically cross-linking F(ab') fragments of the FcR for IgA (Fc alpha RI)-specific mAb (A77) with tumor Ag-specific mAb (anti-HER2/neu and anti-epidermal growth factor receptor), we have developed bispecific molecules (BSM) that simultaneously bind to respective tumor Ags and Fc alpha RI-expressing effector cells in whole blood. These BSM mediated up to 55% of specific lysis of appropriate tumor Ag-expressing target cells (from a variety of tumors) with purified polymorphonuclear leukocytes, monocytes, or whole blood effector cells without preactivation with exogenous cytokines. To our knowledge, this is the first demonstration of Ab-dependent cell-mediated cytotoxic activity via Fc alpha RI in whole blood. Also, monocyte-derived macrophages mediated phagocytosis of HER2/neu-expressing tumor cells (>95% tumor cell loss). These BSM-mediated cytotoxic activities were completely inhibited by F (ab')2 of A77, demonstrating the specific role of Fc alpha RI as a trigger molecule. Furthermore, the binding of these BSM to monocytes or polymorphonuclear leukocytes in whole blood did not induce modulation of Fc alpha RI in the absence of the target Ag. Therefore, immune effector cells may be "armed" with Fc alpha RI-directed BSM in whole blood. These Fc alpha RI-directed BSM may offer new treatment options for various malignancies and other disease conditions.

PMID: 9469424 [PubMed - indexed for MEDLINE]

Display Abstract Sort Save Text Clip Add Order

1: Cancer Detect Prev 1993;17(2):295-300

Use of anti-CD3 and anti-CD16 bispecific monoclonal antibodies for the targeting of T and NK cells against tumor cells.

Ferrini S, Cambiaggi A, Sforzini S, Canevari S, Mezzanzanica D, Colnaghi MI, Moretta L.

Istituto Nazionale per la Ricerca sul Cancro, Genova, Italy.

To target T lymphocytes against EGF-R+ tumors, we constructed anti-CD3/anti-EGF-R bimAbs either by the generation of a hybrid hybridoma (quadroma) or by a chemical cross-linking method. Analysis of the in vitro functional activity of these two different constructs indicated that the quadroma-secreted bimAb was more efficient in targeting the CD3+8+ clones against EGF-R+ target cells with respect to the bimAb produced by chemical method. In addition, the quadroma-produced bimAb is able to induce cytolysis of EGF-R+ tumor cell lines of PHA-induced lymphoblasts that had been expanded in IL-2-containing medium, whereas tumor cells lacking expression of EGF-R were not lysed. Resting PBL targeted by the bimAb did not display significant cytotoxicity against the relevant tumor. An anti-CD16 hybridoma (IgG1) was fused with an anti-folate-binding protein hybrid (IgG2a) to construct bimAbs to target NK cells against NK-resistant ovarian carcinomas. The hybrid IgG1/IgG2a bimAb triggered the specific lysis of relevant target cells by resting NK cells, but it was ineffective when CD8+TCR alpha/beta+ cultured cell populations were used as effectors. Only marginal increases of cytolytic activity could be induced by the bimAb when IL-2-activated PBL (i.e., LAK cells) were used as effectors due to the high cytolytic activity of these cells against the relevant tumors in the absence of bimAb. The possible use of anti-CD16 or anti-CD3 bimAbs for the development of different cellular immunotherapy strategies against cancer is discussed.

PMID: 8402715 [PubMed - indexed for MEDLINE]

☐ 1: J Hematother 1995 Oct;4(5):369-76

Lysis of small cell carcinoma of the lung (SCCL) cells by cytokine-activated monocytes and natural killer cells in the presence of bispecific immunoconjugates containing a gastrin-releasing peptide (GRP) analog or a GRP antagonist.

Chen J, Zhou JH, Mokotoff M, Fanger MW, Ball ED.

Division of Hematology/Bone Marrow Transplantation, University of Pittsburgh Medical Center, PA 15213, USA.

Lung cancer remains the leading cause of cancer deaths in the United States. We have developed a new immunotherapeutic approach to the treatment of small cell carcinoma of the lung (SCCL) by targeting the gastrin-releasing peptide receptor (GRP-R) expressed on the surface of these cells. Bispecific immunoconjugates were constructed by chemical fusion of a GRP analog or a GRP antagonist with monoclonal antibodies directed to the cytotoxic trigger molecules Fc gamma RI and Fc gamma RIII on various immune effector cells. We demonstrated that these bispecific immunoconjugates bound to target SCCL cells in a dose-dependent manner. In the presence of these immunoconjugates, more than 80% of SCCL cells were lysed by cytokine-activated monocytes and natural killer (NK) cells measured by a 51Cr-release assay. These data indicate that bifunctional antibodies targeting GRP may have clinical use.

PMID: 8581371 [PubMed - indexed for MEDLINE]

☐ 1: J Biol Chem 1994 Feb 18;269(7):4979-85

Functional properties of antibody insulin-like growth factor fusion proteins.

Shin SU, Friden P, Moran M, Morrison SL.

Alkermes, Inc., Cambridge, Massachusetts 02139.

Genetic engineering and expression techniques have been used to produce antibody growth factor fusion proteins. Insulin-like growth factors (IGFs) 1 and 2 have been fused to mouse-human chimeric IgG3 at the end of CH1, immediately after the hinge, and at the end of CH3. Fusion heavy chains of the expected molecular weight were expressed, assembled with a co-expressed light chain, and secreted. The resulting molecules continued to bind antigen; they also bound the growth factor receptors, albeit with decreased affinity. The molecule with IGF1 attached after CH3 (CH3-IGF1) had reduced ability to carry out complement-mediated cytolysis. In contrast the molecule with IGF2 attached after CH3 (CH3-IGF2) showed an approximately 50-fold increase in its ability to effect complement-mediated cytolysis and so should be an effective cytolytic agent. Both CH3-IGF1 and CH3-IGF2 bound Fc gamma RI with affinity similar to that of IgG3. The growth factor fusion proteins showed small but significant uptake into the brain parenchyma.

PMID: 8106473 [PubMed - indexed for MEDLINE]

FULL ESTIMATED COST 0.21 0.21

FILE 'MEDLINE' ENTERED AT 13:35:54 ON 16 MAY 2002

FILE 'CAPLUS' ENTERED AT 13:35:54 ON 16 MAY 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE 'EMBASE' ENTERED AT 13:35:54 ON 16 MAY 2002

FILE 'CANCERLIT' ENTERED AT 13:35:54 ON 16 MAY 2002

FILE 'USPATFULL' ENTERED AT 13:35:54 ON 16 MAY 2002

=> s bispecific? and molecule?
L1 2715 BISPECIFIC? AND MOLECULE?

=> s antibod? and l1
L2 2663 ANTIBOD? AND L1

=> s l2 and growth factor
4 FILES SEARCHED...
L3 719 L2 AND GROWTH FACTOR

=> s l3 and chimer? or fusion?
L4 458538 L3 AND CHIMER? OR FUSION?

=> s l3 not py=>1995
L5 35 L3 NOT PY=>1995

=> d l5 1-35

L5 ANSWER 1 OF 35 MEDLINE
AN 95383036 MEDLINE
DN 95383036 PubMed ID: 7654439
TI Induction of tumour cell lysis by a **bispecific antibody** recognising epidermal **growth factor** receptor (EGFR) and CD3.
AU Knuth A; Bernhard H; Jager E; Wolfel T; Karbach J; Jaggle C; Strittmatter W; Meyer zum Buschenfelde K H
CS II Medizinische Klinik, Hamatologie/Onkologie, Krankenhaus Nordwest, Frankfurt a. Main, Germany.
SO EUROPEAN JOURNAL OF CANCER, (1994) 30A (8) 1103-7.
Journal code: ARV; 9005373. ISSN: 0959-8049.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199510
ED Entered STN: 19951013
Last Updated on STN: 20000303
Entered Medline: 19951005

L5 ANSWER 2 OF 35 MEDLINE
AN 94075058 MEDLINE
DN 94075058 PubMed ID: 8253530
TI Targeting of T lymphocytes against EGF-receptor+ tumor cells by **bispecific** monoclonal **antibodies**: requirement of CD3 **molecule** cross-linking for T-cell activation.
AU Ferrini S; Cambiaggi A; Sforzini S; Marciano S; Canevari S; Mezzanzanica D; Colnaghi M I; Grossi C E; Moretta L
CS Istituto Nazionale per la Ricerca sul Cancro, Genoa, Italy.
SO INTERNATIONAL JOURNAL OF CANCER, (1993 Dec 2) 55 (6) 931-7.
Journal code: GQU; 0042124. ISSN: 0020-7136.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199401
ED Entered STN: 19940203
Last Updated on STN: 20000303
Entered Medline: 19940110

L5 ANSWER 3 OF 35 MEDLINE
AN 93107863 MEDLINE
DN 93107863 PubMed ID: 1335026
TI The efficiency of cell targeting by recombinant retroviruses depends on the nature of the receptor and the composition of the artificial cell-virus linker.
AU Etienne-Julan M; Roux P; Carillo S; Jeanteur P; Piechaczyk M
CS Laboratoire de Biologie Moleculaire, URA CNRS 1191 Genetique Moleculaire, Universite Montpellier II Sciences et Techniques du Languedoc, France.
SO JOURNAL OF GENERAL VIROLOGY, (1992 Dec) 73 (Pt 12) 3251-5.
Journal code: I9B; 0077340. ISSN: 0022-1317.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199301
ED Entered STN: 19930212
Last Updated on STN: 20000303
Entered Medline: 19930125

L5 ANSWER 4 OF 35 MEDLINE
AN 93090873 MEDLINE
DN 93090873 PubMed ID: 1457511
TI Biology and therapy with biologic agents in gynecologic cancer.
AU Wiener J R; Berchuck A; Bast R C Jr
CS Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, NC 27710.
SO CURRENT OPINION IN ONCOLOGY, (1992 Oct) 4 (5) 946-54. Ref: 52
Journal code: A1V; 9007265. ISSN: 1040-8746.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 199301
ED Entered STN: 19930129
Last Updated on STN: 19930129
Entered Medline: 19930108

L5 ANSWER 5 OF 35 MEDLINE
AN 92113462 MEDLINE
DN 92113462 PubMed ID: 1346155
TI Development of humanized **bispecific antibodies** reactive with cytotoxic lymphocytes and tumor cells overexpressing the HER2 protooncogene.
AU Shalaby M R; Shepard H M; Presta L; Rodrigues M L; Beverley P C; Feldmann M; Carter P
CS Department of Cell Biology, Genentech, Inc., South San Francisco, California 94080.
SO JOURNAL OF EXPERIMENTAL MEDICINE, (1992 Jan 1) 175 (1) 217-25.
Journal code: I2V; 2985109R. ISSN: 0022-1007.

CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199202
ED Entered STN: 19920308
Last Updated on STN: 20000303
Entered Medline: 19920214

L5 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1994:653350 CAPLUS
DN 121:253350
TI Induction of tumor cell lysis by a **bispecific antibody** recognizing epidermal **growth factor** receptor (EGFR) and CD3
AU Knuth, A.; Bernhard, H.; Jaeger, E.; Woelfel, T.; Karbach, J.; Jaeggle, C.; Strittmatter, W.; Meyer zum Bueschenfelde, K.-H.
CS Germany
SO Eur. J. Cancer, Part A (1994), 30A(8), 1103-7
CODEN: EJCTEA
DT Journal
LA English

L5 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1994:450110 CAPLUS
DN 121:50110
TI Method for preventing or treating liver disease
IN Schwall, Ralph
PA Genentech, Inc., USA
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9409809	A1	19940511	WO 1993-US9885	19931014
	W: AU, CA, JP, NZ				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9454054	A1	19940524	AU 1994-54054	19931014
PRAI	US 1992-968784		19921030		
	WO 1993-US9885		19931014		

L5 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1994:432944 CAPLUS
DN 121:32944
TI The LFA-1/ICAM cell adhesion pathway is involved in tumor-cell lysis mediated by **bispecific** monoclonal-**antibody**-targeted T lymphocytes
AU Ferrini, Silvano; Sforzini, Sabrina; Cambiaggi, Anna; Poggi, Alessandro; Meazza, Raffaella; Canevari, Silvana; Colnaghi, Maria Ines; Moretta, Lorenzo
CS Ist. Naz. per la Ric. sul Cancro, Genoa, 16132/10, Italy
SO Int. J. Cancer (1994), 56(6), 846-52
CODEN: IJCNAW; ISSN: 0020-7136
DT Journal
LA English

L5 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1994:214901 CAPLUS
DN 120:214901
TI Targeting of T lymphocytes against EGF-receptor+ tumor cells by **bispecific** monoclonal **antibodies**: requirement of CD3 **molecule** crosslinking for T-cell activation
AU Ferrini, Silvano; Cambiaggi, Anna; Sforzini, Sabrina; Marciano, Sabrina; Canevari, Silvana; Mezzanzanica, Delia; Colnaghi, Maria Ines; Grossi, Carlo Enrico; Moretta, Lorenzo
CS Ist. Naz. Ric. Cancro, Genoa, Italy
SO Int. J. Cancer (1993), 55(6), 931-7
CODEN: IJCNAW; ISSN: 0020-7136
DT Journal
LA English

L5 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1993:167190 CAPLUS
DN 118:167190
TI Development of humanized **bispecific antibodies** reactive with cytotoxic lymphocytes and tumor cells overexpressing the HER2 protooncogene
AU Shalaby, M. Refaat; Shepard, H. Michael; Presta, Len; Rodrigues, Maria L.; Beverley, Peter C. L.; Feldmann, Marc; Carter, Paul
CS Dep. Cell Biol., Genentech, Inc., South San Francisco, CA, 94080, USA
SO J. Exp. Med. (1992), 175(1), 217-25
CODEN: JEMEAV; ISSN: 0022-1007
DT Journal
LA English

L5 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1993:145294 CAPLUS
DN 118:145294
TI Possible targets on carcinoma for bMAb retargeting of lymphocyte or drug cytotoxicity
AU Canevari, Silvana; Mezzanzanica, Delia; Menard, Sylvie; Ferrini, Silvano; Moretta, Lorenzo; Colnaghi, Maria Ines
CS Ist. Naz. Tumori, Milan, I-20133, Italy
SO Int. J. Cancer, Suppl. (1992), 7(Bispecific Antibodies Targeted Cell Cytotoxic.), 42-4
CODEN: IJSUEZ; ISSN: 0898-6924
DT Journal; General Review
LA English

L5 ANSWER 12 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1993:95207 CAPLUS
DN 118:95207
TI The efficiency of cell targeting by recombinant retroviruses depends on the nature of the receptor and the composition of the artificial cell-virus linker
AU Etienne-Julan, Maryse; Roux, Pierre; Carillo, Serge; Jeanteur, Philippe; Piechaczyk, Marc
CS Lab. Biol. Mol., Univ. Montpellier II Sci. Tech. Languedoc, Montpellier, 34095, Fr.
SO J. Gen. Virol. (1992), 73(12), 3251-5
CODEN: JGVIAY; ISSN: 0022-1317
DT Journal
LA English

L5 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1991:205190 CAPLUS
DN 114:205190
TI Two distinct monoclonal **antibodies** raised against mouse .beta. nerve **growth factor**. Generation of bi-specific anti-nerve **growth factor** anti-horseradish peroxidase **antibodies** for use in a homogeneous enzyme immunoassay
AU Kenigsberg, Rhoda L.; Elliott, Peter J.; Cuello, A. Claudio
CS Dep. Pharm. Ther., McGill Univ., Montreal, PQ, H3G 1Y6, Can.
SO J. Immunol. Methods (1991), 136(2), 247-57
CODEN: JIMMBG; ISSN: 0022-1759
DT Journal

LA English

L5 ANSWER 14 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 94274773 EMBASE
DN 1994274773
TI Induction of tumour cell lysis by a **bispecific antibody** recognising epidermal **growth factor** receptor (EGFR) and CD3.
AU Knuth A.; Bernhard H.; Jager E.; Wolfel T.; Karbach J.; Jaggle C.; Strittmatter W.; Meyer zum Buschenfelde K.-H.
CS II Medizinische Klinik, Hamatologie/Onkologie, Krankenhaus Nordwest, Steinbacher Hohl 2-26, D-60488 Frankfurt a. Main, Germany
SO European Journal of Cancer Part A: General Topics, (1994) 30/8 (1103-1107).
ISSN: 0959-8049 CODEN: EJCTEA
CY United Kingdom
DT Journal; Article
FS 016 Cancer
026 Immunology, Serology and Transplantation
LA English
SL English

L5 ANSWER 15 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 94236664 EMBASE
DN 1994236664
TI Pharmacological modulation of peptide **growth factor** receptor expression on tumor cells as a basis for cancer therapy.
AU Tagliaferri P.; Caraglia M.; Muraro R.; Pinto A.; Budillon A.; Zagonel V.; Bianco A.R.
CS Cattedra di Oncologia Medica, Facolta di Medicina, Universita 'Federico II' di Napoli, via S Pansini 5,80131 Naples, Italy
SO Anti-Cancer Drugs, (1994) 5/4 (379-393).
ISSN: 0959-4973 CODEN: ANTDEV
CY United Kingdom
DT Journal; General Review
FS 016 Cancer
026 Immunology, Serology and Transplantation
030 Pharmacology
037 Drug Literature Index
LA English
SL English

L5 ANSWER 16 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 94011887 EMBASE
DN 1994011887
TI Targeting of T lymphocytes against EGF-receptor+ tumor cells by **bispecific** monoclonal **antibodies**: Requirement of CD3 **molecule** cross-linking for T-cell activation.
AU Ferrini S.; Cambiaggi A.; Sforzini S.; Marciano S.; Canevari S.; Mezzanzanica D.; Colnaghi M.I.; Grossi C.E.; Moretta L.
CS Ist. Naz. per la Ricerca sul Cancro, V.le Benedetto XV 10,16132 Genoa, Italy
SO International Journal of Cancer, (1993) 55/6 (931-937).
ISSN: 0020-7136 CODEN: IJCNAW
CY United States
DT Journal; Article
FS 016 Cancer
026 Immunology, Serology and Transplantation
LA English
SL English

L5 ANSWER 17 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 93014179 EMBASE
DN 1993014179
TI The efficiency of cell targeting by recombinant retroviruses depends on the nature of the receptor and the composition of the artificial cell-virus linker.
AU Etienne-Julan M.; Roux P.; Carillo S.; Jeanteur P.; Piechaczyk M.
CS Laboratoire de Biologie Moleculaire, URA CNRS 1191 Genetique Moleculaire, Universite Montpellier II, Place E Bataillon,34095 Montpellier Cedex 05, France
SO Journal of General Virology, (1992) 73/12 (3251-3255).
ISSN: 0022-1317 CODEN: JGVIAY
CY United Kingdom
DT Journal; Article
FS 004 Microbiology
LA English
SL English

L5 ANSWER 18 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 92358961 EMBASE
DN 1992358961
TI Possible targets on carcinoma for bMAb retargeting of lymphocyte or drug cytotoxicity.
AU Canevari S.; Mezzanzanica D.; Menard S.; Ferrini S.; Moretta L.; Colnaghi M.I.
CS Oncologia Sperimentale E, Istituto Nazionale Tumori, Via Venezian 1,I-20133, Italy
SO International Journal of Cancer, (1992) -/SUPPL. 7 (42-44).
ISSN: 0020-7136 CODEN: IJCNAW
CY United States
DT Journal; Conference Article
FS 016 Cancer
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English

L5 ANSWER 19 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 92321497 EMBASE
DN 1992321497
TI Biology and therapy with biologic agents in gynecologic cancer.
AU Wiener J.R.; Berchuck A.; Bast Jr. R.C.
CS Department of Obstetrics/Gynecology, Department of Surgery, Box 3843,Durham, NC 27710, United States
SO Current Opinion in Oncology, (1992) 4/5 (946-954).
ISSN: 1040-8746 CODEN: CUOOE8
CY United States
DT Journal; General Review
FS 010 Obstetrics and Gynecology
016 Cancer
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English

L5 ANSWER 20 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 92021180 EMBASE
DN 1992021180
TI Development of humanized **bispecific antibodies** reactive with cytotoxic lymphocytes and tumor cells overexpressing the HER2 protooncogene.
AU Shalaby M.R.; Shepard H.M.; Presta L.; Rodrigues M.L.; Beverley P.C.L.; Feldmann M.; Carter P.
CS Department of Cell Biology, Genentech, Inc., 460 Point San Bruno Boulevard,South San Francisco, CA 94080, United States
SO Journal of Experimental Medicine, (1992) 175/1 (217-225).
ISSN: 0022-1007 CODEN: JEMEAV

CY United States
DT Journal; Article
FS 016 Cancer
022 Human Genetics
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English

L5 ANSWER 21 OF 35 CANCERLIT
AN 95383036 CANCERLIT
DN 95383036
TI Induction of tumour cell lysis by a **bispecific antibody** recognising epidermal **growth factor** receptor (EGFR) and CD3.
AU Knuth A; Bernhard H; Jager E; Wolfel T; Karbach J; Jaggle C; Strittmatter W; Meyer zum Buschenfelde K H
CS II Medizinische Klinik, Hamatologie/Onkologie, Krankenhaus Nordwest, Frankfurt a. Main, Germany.
SO EUROPEAN JOURNAL OF CANCER, (1994). 30A (8), pp. 1103-7.
Journal code: ARV. ISSN: 0959-8049.
DT Journal; Article; (JOURNAL ARTICLE)
FS MEDL; L; Priority Journals; Cancer Journals
LA English
OS MEDLINE 95383036
EM 199511

L5 ANSWER 22 OF 35 CANCERLIT
AN 94699308 CANCERLIT
DN 94699308
TI Immunology and molecular biology of Hodgkin's and Reed-Sternberg cells: implications for the pathogenesis and therapeutic perspectives of Hodgkin's disease (Meeting abstract).
AU Trumper L; Daus H; Pfreundschuh M
CS Med. Univ.-Klinik I, D-6650 Homburg, Germany.
SO Non-serial, (1993). Molecular Biology of Hematopoiesis, 8th Symposium. July 9-13, 1993, Basel, Switzerland.
DT Journal; Article; (JOURNAL ARTICLE)
FS ICDB
LA English
EM 199411

L5 ANSWER 23 OF 35 CANCERLIT
AN 94075058 CANCERLIT
DN 94075058
TI Targeting of T lymphocytes against EGF-receptor+ tumor cells by **bispecific** monoclonal **antibodies**: requirement of CD3 **molecule** cross-linking for T-cell activation.
AU Ferrini S; Cambiaggi A; Sforzini S; Marciano S; Canevari S; Mezzanzanica D; Colnaghi M I; Grossi C E; Moretta L
CS Istituto Nazionale per la Ricerca sul Cancro, Genoa, Italy.
SO INTERNATIONAL JOURNAL OF CANCER, (1993). Vol. 55, No. 6, pp. 931-7.
Journal code: GQU. ISSN: 0020-7136.
DT Journal; Article; (JOURNAL ARTICLE)
FS MEDL; L; Priority Journals; Cancer Journals
LA English
OS MEDLINE 94075058
EM 199402

L5 ANSWER 24 OF 35 CANCERLIT
AN 93107863 CANCERLIT
DN 93107863
TI The efficiency of cell targeting by recombinant retroviruses depends on the nature of the receptor and the composition of the artificial cell-virus linker.
AU Etienne-Julan M; Roux P; Carillo S; Jeanteur P; Piechaczyk M
CS Laboratoire de Biologie Moleculaire, URA CNRS 1191 Genetique Moleculaire, Universite Montpellier II Sciences et Techniques du Languedoc, France.
SO JOURNAL OF GENERAL VIROLOGY, (1992). Vol. 73, Pt. 12, pp. 3251-5.
Journal code: I9B. ISSN: 0022-1317.
DT Journal; Article; (JOURNAL ARTICLE)
FS MEDL; L; Priority Journals; Cancer Journals
LA English
OS MEDLINE 93107863
EM 199302

L5 ANSWER 25 OF 35 CANCERLIT
AN 93090873 CANCERLIT
DN 93090873
TI Biology and therapy with biologic agents in gynecologic cancer.
AU Wiener J R; Berchuck A; Bast R C Jr
CS Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, NC 27710.
SO CURRENT OPINION IN ONCOLOGY, (1992). Vol. 4, No. 5, pp. 946-54.
Journal code: A1V. ISSN: 1040-8746.
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
FS MEDL; L; Priority Journals
LA English
OS MEDLINE 93090873
EM 199302

L5 ANSWER 26 OF 35 CANCERLIT
AN 92113462 CANCERLIT
DN 92113462
TI Development of humanized **bispecific antibodies** reactive with cytotoxic lymphocytes and tumor cells overexpressing the HER2 protooncogene.
AU Shalaby M R; Shepard H M; Presta L; Rodrigues M L; Beverley P C; Feldmann M; Carter P
CS Department of Cell Biology, Genentech, Inc., South San Francisco, California 94080.
SO JOURNAL OF EXPERIMENTAL MEDICINE, (1992). Vol. 175, No. 1, pp. 217-25.
Journal code: I2V. ISSN: 0022-1007.
DT Journal; Article; (JOURNAL ARTICLE)
FS MEDL; L; Priority Journals; Cancer Journals
LA English
OS MEDLINE 92113462
EM 199203

L5 ANSWER 27 OF 35 CANCERLIT
AN 91662231 CANCERLIT
DN 91662231
TI IMMUNE SYSTEM AND CANCER.
AU Anonymous
CS No affiliation given.
SO Non-serial, (1989). Immune System and Cancer. Tokyo, 1988. Hamaoka T et al, eds. Philadelphia, Taylor and Francis, 347.
DT Book; (MONOGRAPH)
FS ICDB
LA English
EM 199103

L5 ANSWER 28 OF 35 USPATFULL
AN 94:64243 USPATFULL
TI Detection and treatment of infections with immunoconjugates
IN Goldenberg, M. David, Short Hills, NJ, United States

PA Immunomedics, Morris Plains, NJ, United States (U.S. corporation)
PI US 5332567 19940726
AI US 1993-37659 19930322 (8)
RLI Continuation of Ser. No. US 1992-840591, filed on 18 Feb 1992, now abandoned which is a continuation of Ser. No. US 1989-399566, filed on 24 Aug 1989, now abandoned
DT Utility
FS Granted
LN.CNT 1460
INCL INCLM: 424/001.490
INCLS: 424/002.000; 424/009.000; 424/001.530; 424/136.100; 424/159.100; 424/164.100; 424/178.100
NCL NCLM: 424/001.490
NCLS: 424/001.530; 424/009.341; 424/136.100; 424/159.100; 424/164.100; 424/178.100
IC [5]
ICM: A61K043-00
ICS: A61K049-00; A61K039-00; G01N001-00
EXF 424/1.1; 424/2; 424/85.8; 424/9; 424/86; 424/87
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 29 OF 35 USPATFULL
AN 94:62551 USPATFULL
TI CR2 ligand compositions and methods for modulating immune cell functions
IN Lernhardt, Waldemar, Solana Beach, CA, United States
PA California Institute of Biological Research, La Jolla, CA, United States (U.S. corporation)
PI US 5331090 19940719
AI US 1989-404679 19890908 (7)
DT Utility
FS Granted
LN.CNT 1421
INCL INCLM: 530/329.000
INCLS: 530/328.000; 530/327.000
NCL NCLM: 530/329.000
NCLS: 530/327.000; 530/328.000
IC [5]
ICM: A61K037-00
ICS: A61K037-02; C07K005-00; C07K007-00
EXF 530/329; 530/328; 530/327; 530/330; 514/15; 514/16; 514/17; 514/18; 514/19
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 30 OF 35 USPATFULL
AN 94:60277 USPATFULL
TI Carbohydrate-directed cross-linking reagents
IN Ashkenazi, Avi J., San Mateo, CA, United States
Chamow, Steven M., San Mateo, CA, United States
Kogan, Timothy P., Sugar Land, TX, United States
PA Genentech, Inc., San Francisco, CA, United States (U.S. corporation)
PI US 5329028 19940712
AI US 1992-926077 19920805 (7)
DT Utility
FS Granted
LN.CNT 1001
INCL INCLM: 548/548.000
INCLS: 548/536.000; 548/547.000; 548/549.000
NCL NCLM: 548/548.000
NCLS: 548/546.000; 548/547.000; 548/549.000
IC [5]
ICM: C07D207-452
EXF 548/546; 548/547; 548/548; 548/549
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 31 OF 35 USPATFULL
AN 94:40048 USPATFULL
TI Interferon-related polypeptides as CR2 ligands and their use for modulating immune cell functions
IN Lernhardt, Waldemar, Solana Beach, CA, United States
PA California Institute of Biological Research, La Jolla, CA, United States (U.S. corporation)
PI US 5310729 19940510
AI US 1990-512118 19900420 (7)
DT Utility
FS Granted
LN.CNT 1863
INCL INCLM: 514/015.000
INCLS: 514/016.000; 530/327.000; 530/328.000
NCL NCLM: 514/015.000
NCLS: 514/016.000; 530/327.000; 530/328.000
IC [5]
ICM: A61K037-00
ICS: A61K037-02; C07K005-00; C07K007-00
EXF 514/15; 514/14; 514/16; 514/13; 514/12; 530/328; 530/327; 530/300
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 32 OF 35 USPATFULL
AN 94:5810 USPATFULL
TI Activated protein C polypeptides and anti-peptide **antibodies**, diagnostic methods and systems for inhibiting activated protein C
IN Griffin, John H., Del Mar, CA, United States
Mesters, Rolf M., La Jolla, CA, United States
PA The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)
PI US 5279956 19940118
AI US 1991-720189 19910624 (7)
DT Utility
FS Granted
LN.CNT 2944
INCL INCLM: 435/183.000
INCLS: 435/692.000; 435/090.210; 435/240.270; 436/536.000; 424/085.800; 514/012.000; 530/328.000; 530/326.000; 530/384.000; 530/380.000; 530/381.000; 530/382.000; 530/383.000; 530/389.300; 530/388.260; 530/388.250; 530/324.000; 530/412.000
NCL NCLM: 435/183.000
NCLS: 424/139.100; 424/145.100; 424/158.100; 435/069.200; 435/070.210; 436/536.000; 514/012.000; 530/300.000; 530/324.000; 530/326.000; 530/328.000; 530/381.000; 530/382.000; 530/383.000; 530/384.000; 530/387.900; 530/388.250; 530/388.260; 530/389.300; 530/412.000
IC [5]
ICM: A61K037-02
ICS: A61K039-00; C12N009-00; C07K015-00
EXF 424/85.8; 435/69.2; 435/70.21; 435/240.27; 435/536; 435/183; 514/12; 530/328; 530/326; 530/324; 530/387; 530/380; 530/381; 530/382; 530/383; 530/384; 530/389.3; 530/308.26; 530/388.25; 530/412; 436/536
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 33 OF 35 USPATFULL
AN 93:16591 USPATFULL
TI Hybrid tryptophan aporepressor containing ligand binding sites
IN Lernhardt, Waldemar, Solana Beach, CA, United States
Bourdon, Mario, San Diego, CA, United States
Youderian, Phil, Ramona, CA, United States
PA California Institute of Biological Research, La Jolla, CA, United States (U.S. corporation)
PI US 5190873 19930302
AI US 1991-720222 19910621 (7)
DT Utility

```
FS      Granted
LN.CNT 2112
INCL    INCLM: 435/177.000
        INCLS: 435/069.700; 435/069.100; 530/350.000; 530/812.000; 930/250.000
NCL     NCLM:  435/177.000
        NCLS:  435/069.100; 435/069.700; 530/350.000; 530/812.000; 930/250.000
IC      [5]
        ICM: C07K013-00
        ICS: C07K017-00; C07K017-02; C12P021-00
EXF     435/91; 435/69.7; 435/69.1; 435/177; 530/350; 530/812; 930/250
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5   ANSWER 34 OF 35  USPATFULL
AN      92:102981  USPATFULL
TI      Monoclonal antibody to novel antigen associated with human
        tumors
IN      Hellstrom, Ingegerd, Seattle, WA, United States
        Hellstrom, Karl E., Seattle, WA, United States
        Marquardt, Hans, Mercer Island, WA, United States
PA      Oncogen, Seattle, WA, United States (U.S. corporation)
PI      US 5171665              19921215
AI      US 1989-339142          19890417 (7)
DT      Utility
FS      Granted
LN.CNT 1173
INCL    INCLM: 435/007.230
        INCLS: 435/007.900; 435/172.200; 435/240.270; 436/548.000; 436/813.000;
               436/064.000; 530/387.700; 530/388.800; 530/388.850
NCL     NCLM:  435/007.230
        NCLS:  435/007.900; 435/329.000; 435/344.100; 436/064.000; 436/548.000;
               436/813.000; 530/387.700; 530/388.800; 530/388.850
IC      [5]
        ICM: G01N033-574
        ICS: C12P021-08; C07K015-28
EXF     435/7.23; 435/172.2; 435/240.27; 435/7.9; 436/548; 436/813; 436/64;
        530/387; 530/387.7; 530/388.8; 530/388.85
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5   ANSWER 35 OF 35  USPATFULL
AN      92:61852  USPATFULL
TI      Monoclonal antibody to novel antigen associated with human
        tumors
IN      Hellstrom, Karl E., Seattle, WA, United States
        Hellstrom, Ingegerd, Seattle, WA, United States
        Marquardt, Hans, Mercer Island, WA, United States
        Yoneyama, Yoshitaka, Bellevue, WA, United States
PA      Oncogen Limited Partnership, Seattle, WA, United States (U.S.
        corporation)
PI      US 5134075              19920728
AI      US 1989-312640          19890217 (7)
DT      Utility
FS      Granted
LN.CNT 1097
INCL    INCLM: 530/387.300
        INCLS: 435/070.210; 435/172.200; 530/387.900; 530/828.000; 530/388.850;
               530/388.150; 530/391.300
NCL     NCLM:  530/387.300
        NCLS:  435/070.210; 435/329.000; 435/344.100; 530/387.900; 530/388.150;
               530/388.850; 530/391.300; 530/828.000
IC      [5]
        ICM: C12N005-00
        ICS: C07K015-28
EXF     530/387; 530/828; 435/172.2; 435/240.26; 435/240.27; 435/972; 435/70.21
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

```
=> d his

     (FILE 'HOME' ENTERED AT 13:35:21 ON 16 MAY 2002)

     FILE 'MEDLINE, CAPLUS, EMBASE, CANCERLIT, USPATFULL' ENTERED AT 13:35:54
     ON 16 MAY 2002
L1        2715 S BISPECIFIC? AND MOLECULE?
L2        2663 S ANTIBOD? AND L1
L3         719 S L2 AND GROWTH FACTOR
L4      458538 S L3 AND CHIMER? OR FUSION?
L5          35 S L3 NOT PY=>1995

=> s fusion? molecule?
L6         720 FUSION? MOLECULE?

=> s antibod? and l6
L7         470 ANTIBOD? AND L6

=> s l7 and growth factor?
   4 FILES SEARCHED...
L8         225 L7 AND GROWTH FACTOR?

=> s l8 not py=>1995
L9          11 L8 NOT PY=>1995

=> d l9 1-11

L9   ANSWER 1 OF 11     MEDLINE
AN   92399282     MEDLINE
DN   92399282   PubMed ID: 1381944
TI   Diminution of antibodies directed against tumor cell surface
     epitopes: a single chain Fv fusion molecule
     specifically recognizes the extracellular domain of the c-erbB-2 receptor.
AU   Wels W; Harwerth I M; Hynes N E; Groner B
CS   Friedrich Miescher Institute, Basel, Switzerland.
SO   JOURNAL OF STEROID BIOCHEMISTRY AND MOLECULAR BIOLOGY, (1992 Sep) 43 (1-3)
     1-7.
     Journal code: AX4; 9015483. ISSN: 0960-0760.
CY   ENGLAND: United Kingdom
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Priority Journals
EM   199210
ED   Entered STN: 19921106
     Last Updated on STN: 20000303
     Entered Medline: 19921022

L9   ANSWER 2 OF 11  CAPLUS  COPYRIGHT 2002 ACS
AN   1992:589835  CAPLUS
DN   117:189835
TI   Diminution of antibodies directed against tumor cell surface
     epitopes:  a single chain Fv fusion molecule
     specifically recognizes the extracellular domain of the c-erbB-2 receptor
AU   Wels, W.; Harwerth, I. M.; Hynes, N. E.; Groner, B.
CS   Friedrich Miescher Inst., Basel, 4002, Switz.
SO   J. Steroid Biochem. Mol. Biol. (1992), 43(1-3), 1-7
     CODEN: JSBBEZ; ISSN: 0960-0760
DT   Journal
LA   English

L9   ANSWER 3 OF 11  EMBASE  COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN   92275712  EMBASE
```

DN 1992275712
TI Diminution of **antibodies** directed against tumor cell surface epitopes: A single chain Fv **fusion molecule** specifically recognizes the extracellular domain of the c-erbB-2 receptor.
AU Wels W.; Harwerth I.M.; Hynes N.E.; Groner B.
CS Friedrich Miescher Institute, P.O. Box 2543,4002 Basel, Switzerland
SO Journal of Steroid Biochemistry and Molecular Biology, (1992) 43/1-3 (1-7).
ISSN: 0960-0760 CODEN: JSBBEZ
CY United Kingdom
DT Journal; Conference Article
FS 016 Cancer
LA English
SL English

L9 ANSWER 4 OF 11 CANCERLIT
AN 92399282 CANCERLIT
DN 92399282
TI Diminution of **antibodies** directed against tumor cell surface epitopes: a single chain Fv **fusion molecule** specifically recognizes the extracellular domain of the c-erbB-2 receptor.
AU Wels W; Harwerth I M; Hynes N E; Groner B
CS Friedrich Miescher Institute, Basel, Switzerland.
SO JOURNAL OF STEROID BIOCHEMISTRY AND MOLECULAR BIOLOGY, (1992). Vol. 43, No. 1-3, pp. 1-7.
Journal code: AX4. ISSN: 0960-0760.
DT Journal; Article; (JOURNAL ARTICLE)
FS MEDL; L; Priority Journals; Cancer Journals
LA English
OS MEDLINE 92399282
EM 199211

L9 ANSWER 5 OF 11 USPATFULL
AN 94:57604 USPATFULL
TI Treatment of accelerated atheosclerosis with interleukin-2 receptor targeted molecules
IN Miller, D. Douglas, 7295 Greenway Ave., University City, MO, United States 63130
PI US 5326559 19940705
AI US 1991-701219 19910516 (7)
DT Utility
FS Granted
LN.CNT 738
INCL INCLM: 424/085.200
INCLS: 435/069.500; 435/069.520; 435/069.700; 435/070.210; 514/824.000; 514/002.000; 514/008.000; 514/021.000; 935/106.000; 935/107.000; 935/109.000; 424/183.100; 424/144.100
NCL NCLM: 424/085.200
NCLS: 424/144.100; 424/183.100; 435/069.500; 435/069.520; 435/069.700; 435/070.210; 514/002.000; 514/008.000; 514/021.000; 514/824.000
IC [5]
ICM: A61K037-02
EXF 424/85.1; 424/85.2; 424/85.8; 424/85.91; 435/69.5; 435/69.52; 435/69.7; 435/70.21; 514/824; 514/2; 514/8; 514/21; 935/106-107; 935/109
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 6 OF 11 USPATFULL
AN 94:53387 USPATFULL
TI Cytokine and bioassay therefor
IN Martin, Michael, West Brunswick, Australia
Novotny, Jurgen, Ulm Donau, Germany, Federal Republic of
Boyd, Andrew, Ascot Vale, Australia
Nicola, Nicos A., Regent, Australia
Welch, Karen, Vermont, Australia
McKinstry, William, Northcote, Australia
PA Amrad Corporation Limited, Victoria, United States (non-U.S. corporation)
PI US 5322787 19940621
AI US 1992-876480 19920430 (7)
DT Utility
FS Granted
LN.CNT 645
INCL INCLM: 435/240.200
INCLS: 435/029.000; 435/240.100
NCL NCLM: 435/372.000
NCLS: 435/029.000
IC [5]
ICM: C12Q001-02
EXF 435/29; 435/240.2; 435/240.21
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 7 OF 11 USPATFULL
AN 94:44736 USPATFULL
TI Therapeutic interleukin-2-**antibody** based fusion proteins
IN Fell, Jr., Henry P., Redmond, WA, United States
Gayle, Margit A., Woodinville, WA, United States
PA Oncogen, Seattle, WA, United States (U.S. corporation)
PI US 5314995 19940524
AI US 1990-468390 19900122 (7)
DT Utility
FS Granted
LN.CNT 661
INCL INCLM: 530/351.000
INCLS: 530/387.100; 530/387.300; 530/387.700; 530/388.300; 530/388.400; 530/388.500; 530/388.600; 530/388.800; 530/388.850; 530/391.700; 530/391.900; 435/069.500; 435/069.520; 435/069.700; 435/070.200; 435/070.210; 424/085.800; 424/085.100; 424/085.200; 424/085.910; 935/047.000
NCL NCLM: 530/351.000
NCLS: 424/085.100; 424/085.200; 424/134.100; 424/800.000; 435/069.500; 435/069.520; 435/069.700; 435/070.200; 435/070.210; 530/387.100; 530/387.300; 530/387.700; 530/388.300; 530/388.400; 530/388.500; 530/388.600; 530/388.800; 530/388.850; 530/391.700; 530/391.900
IC [5]
ICM: C07K013-00
EXF 530/387; 530/389-391; 530/808; 530/810; 530/351; 530/387.1; 530/387.3; 530/387.7; 530/388.3-388.6; 530/388.8; 530/388.85; 530/391.7; 530/391.9; 530/866; 530/867; 435/69.5; 435/69.52; 435/69.7; 435/70.2; 435/70.21; 935/47; 424/85.8; 424/85.1; 424/85.2; 424/85.91
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 8 OF 11 USPATFULL
AN 94:20081 USPATFULL
TI Peptide and protein fusions to thioredoxin and thioredoxin-like molecules
IN McCoy, John, Reading, MA, United States
LaVallie, Edward R., Tewksbury, MA, United States
PA Genetics Institute, Inc., Cambridge, MA, United States (U.S. corporation)
PI US 5292646 19940308
AI US 1992-921848 19920728 (7)
RLI Continuation-in-part of Ser. No. US 1991-745382, filed on 14 Aug 1991 which is a continuation-in-part of Ser. No. US 1991-652531, filed on 6 Feb 1991, now abandoned
DT Utility
FS Granted
LN.CNT 1565
INCL INCLM: 435/069.700

INCLS: 435/240.100; 435/240.200; 435/243.000; 435/252.300; 435/252.330; 435/320.100; 435/254.110; 435/254.210; 530/350.000; 536/023.400; 935/044.000; 935/047.000
NCL NCLM: 435/069.700
NCLS: 435/243.000; 435/252.300; 435/252.330; 435/254.110; 435/254.200; 435/320.100; 530/350.000; 536/023.400
IC [5]
ICM: C12N001-00
ICS: C12N005-10; C12N015-62; C12N015-63; C07K013-00
EXF 435/69.1; 435/69.7; 435/189; 435/252.3; 435/243; 435/240.1; 435/320.1; 530/350; 536/27; 536/23.4; 935/10; 935/27; 935/72
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 9 OF 11 USPATFULL
AN 94:15878 USPATFULL
TI Functional derivatives of ICAM-1 which are substantially capable of binding to LFA-1 but are substantially incapable of binding to MAC-1
IN Diamond, Michael S., Cambridge, MA, United States
Staunton, Donald E., Chestnut Hill, MA, United States
Springer, Timothy A., Newton, MA, United States
PA Center For Blood Research, Inc., Boston, MA, United States (U.S. corporation)
PI US 5288854 19940222
AI US 1990-618286 19901128 (7)
DT Utility
FS Granted
LN.CNT 2374
INCL INCLM: 530/395.000
INCLS: 530/350.000; 530/808.000; 530/827.000; 530/868.000; 424/088.000
NCL NCLM: 530/395.000
NCLS: 424/143.100; 424/278.100; 530/350.000; 530/388.220; 530/808.000; 530/827.000; 530/868.000
IC [5]
ICM: C07K009-00
ICS: A61K037-02
EXF 530/350; 530/395; 530/402-403; 530/808; 530/827; 530/868; 424/88; 514/2; 514/12; 514/8; 514/885
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 10 OF 11 USPATFULL
AN 93:104827 USPATFULL
TI Peptide and protein fusions to thioredoxin and thioredoxin-like molecules
IN McCoy, John, Reading, MA, United States
LaVallie, Edward R., Tewksbury, MA, United States
PA Genetics Institute, Inc., Cambridge, MA, United States (U.S. corporation)
PI US 5270181 19931214
AI US 1991-745382 19910814 (7)
RLI Continuation-in-part of Ser. No. US 1991-652531, filed on 6 Feb 1991, now abandoned
DT Utility
FS Granted
LN.CNT 1404
INCL INCLM: 435/069.700
INCLS: 435/320.100; 435/243.000; 435/252.300; 435/252.330; 435/254.110; 536/023.400; 935/010.000; 935/027.000; 935/006.600; 935/006.900; 935/072.000; 935/073.000
NCL NCLM: 435/069.700
NCLS: 435/243.000; 435/252.300; 435/252.330; 435/254.110; 435/320.100; 536/023.400
IC [5]
ICM: C12P021-02
ICS: C12N015-11; C12N015-24; C12N015-62
EXF 536/27; 435/69.1; 435/69.7; 435/243; 435/240.1; 435/320.1; 435/252.3; 435/252.33; 435/255; 935/10; 935/27; 935/72
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 11 OF 11 USPATFULL
AN 92:25251 USPATFULL
TI Method of producing and isolating IGG-binding protein a fusion peptides and a vector therefor
IN Lofdahl, Sven, Uppsala, Sweden
Uhlen, Mathias, Uppsala, Sweden
Lindberg, Martin, Uppsala, Sweden
Sjoquist, John, Uppsala, Sweden
PA Pharmacia LKB Biotechnology AB, Uppsala, Sweden (non-U.S. corporation)
PI US 5100788 19920331
AI US 1988-196846 19880509 (7)
RLI Continuation of Ser. No. US 1984-667492, filed on 9 Oct 1984, now abandoned
PRAI SE 1983-693 19830209
DT Utility
FS Granted
LN.CNT 2485
INCL INCLM: 435/069.700
INCLS: 435/071.200; 435/091.000; 435/172.300; 435/252.300; 435/252.310; 435/252.330; 435/320.100
NCL NCLM: 435/069.700
NCLS: 435/071.200; 435/091.410; 435/252.300; 435/252.310; 435/252.330; 435/320.100; 435/488.000
IC [5]
ICM: C12P021-02
ICS: C12N015-09; C12N015-11; C12N001-20
EXF 435/91; 435/172.3; 435/69.1; 435/79.1; 530/300; 530/350
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
> s bispecific? and molecule?
L1          2715 BISPECIFIC? AND MOLECULE?

=> s antibod? and l1
L2          2663 ANTIBOD? AND L1

=> s l2 and growth factor
   4 FILES SEARCHED...
L3           719 L2 AND GROWTH FACTOR

=> s l3 and chimer? or fusion?
L4        458538 L3 AND CHIMER? OR FUSION?

=> s l3 not py=>1995
L5           35 L3 NOT PY=>1995

=> d l5 1-35

L5   ANSWER 1 OF 35     MEDLINE
AN   95383036     MEDLINE
DN   95383036   PubMed ID: 7654439
TI   Induction of tumour cell lysis by a bispecific antibody
     recognising epidermal growth factor receptor (EGFR)
     and CD3.
AU   Knuth A; Bernhard H; Jager E; Wolfel T; Karbach J; Jaggle C; Strittmatter
     W; Meyer zum Buschenfelde K H
CS   II Medizinische Klinik, Hamatologie/Onkologie, Krankenhaus Nordwest,
     Frankfurt a. Main, Germany.
SO   EUROPEAN JOURNAL OF CANCER, (1994) 30A (8) 1103-7.
     Journal code: ARV; 9005373. ISSN: 0959-8049.
CY   ENGLAND: United Kingdom
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Priority Journals
EM   199510
ED   Entered STN: 19951013
     Last Updated on STN: 20000303
     Entered Medline: 19951005

L5   ANSWER 2 OF 35     MEDLINE
AN   94075058     MEDLINE
DN   94075058   PubMed ID: 8253530
TI   Targeting of T lymphocytes against EGF-receptor+ tumor cells by
     bispecific monoclonal antibodies: requirement of CD3
     molecule cross-linking for T-cell activation.
AU   Ferrini S; Cambiaggi A; Sforzini S; Marciano S; Canevari S; Mezzanzanica
     D; Colnaghi M I; Grossi C E; Moretta L
CS   Istituto Nazionale per la Ricerca sul Cancro, Genoa, Italy.
SO   INTERNATIONAL JOURNAL OF CANCER, (1993 Dec 2) 55 (6) 931-7.
     Journal code: GQU; 0042124. ISSN: 0020-7136.
CY   United States
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Priority Journals
EM   199401
ED   Entered STN: 19940203
     Last Updated on STN: 20000303
     Entered Medline: 19940110

L5   ANSWER 3 OF 35     MEDLINE
AN   93107863     MEDLINE
DN   93107863   PubMed ID: 1335026
TI   The efficiency of cell targeting by recombinant retroviruses depends on
     the nature of the receptor and the composition of the artificial
```

cell-virus linker.
AU Etienne-Julan M; Roux P; Carillo S; Jeanteur P; Piechaczyk M
CS Laboratoire de Biologie Moleculaire, URA CNRS 1191 Genetique Moleculaire, Universite Montpellier II Sciences et Techniques du Languedoc, France.
SO JOURNAL OF GENERAL VIROLOGY, (1992 Dec) 73 (Pt 12) 3251-5.
Journal code: I9B; 0077340. ISSN: 0022-1317.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199301
ED Entered STN: 19930212
Last Updated on STN: 20000303
Entered Medline: 19930125

L5 ANSWER 4 OF 35 MEDLINE
AN 93090873 MEDLINE
DN 93090873 PubMed ID: 1457511
TI Biology and therapy with biologic agents in gynecologic cancer.
AU Wiener J R; Berchuck A; Bast R C Jr
CS Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, NC 27710.
SO CURRENT OPINION IN ONCOLOGY, (1992 Oct) 4 (5) 946-54. Ref: 52
Journal code: A1V; 9007265. ISSN: 1040-8746.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 199301
ED Entered STN: 19930129
Last Updated on STN: 19930129
Entered Medline: 19930108

L5 ANSWER 5 OF 35 MEDLINE
AN 92113462 MEDLINE
DN 92113462 PubMed ID: 1346155
TI Development of humanized **bispecific antibodies** reactive with cytotoxic lymphocytes and tumor cells overexpressing the HER2 protooncogene.
AU Shalaby M R; Shepard H M; Presta L; Rodrigues M L; Beverley P C; Feldmann M; Carter P
CS Department of Cell Biology, Genentech, Inc., South San Francisco, California 94080.
SO JOURNAL OF EXPERIMENTAL MEDICINE, (1992 Jan 1) 175 (1) 217-25.
Journal code: I2V; 2985109R. ISSN: 0022-1007.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199202
ED Entered STN: 19920308
Last Updated on STN: 20000303
Entered Medline: 19920214

L5 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1994:653350 CAPLUS
DN 121:253350
TI Induction of tumor cell lysis by a **bispecific antibody** recognizing epidermal **growth factor** receptor (EGFR) and CD3
AU Knuth, A.; Bernhard, H.; Jaeger, E.; Woelfel, T.; Karbach, J.; Jaeggle, C.; Strittmatter, W.; Meyer zum Bueschenfelde, K.-H.

CS Germany
SO Eur. J. Cancer, Part A (1994), 30A(8), 1103-7
CODEN: EJCTEA
DT Journal
LA English

L5 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1994:450110 CAPLUS
DN 121:50110
TI Method for preventing or treating liver disease
IN Schwall, Ralph
PA Genentech, Inc., USA
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9409809	A1	19940511	WO 1993-US9885	19931014
	W: AU, CA, JP, NZ				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9454054	A1	19940524	AU 1994-54054	19931014
PRAI	US 1992-968784		19921030		
	WO 1993-US9885		19931014		

L5 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1994:432944 CAPLUS
DN 121:32944
TI The LFA-1/ICAM cell adhesion pathway is involved in tumor-cell lysis mediated by **bispecific** monoclonal-**antibody**-targeted T lymphocytes
AU Ferrini, Silvano; Sforzini, Sabrina; Cambiaggi, Anna; Poggi, Alessandro; Meazza, Raffaella; Canevari, Silvana; Colnaghi, Maria Ines; Moretta, Lorenzo
CS Ist. Naz. per la Ric. sul Cancro, Genoa, 16132/10, Italy
SO Int. J. Cancer (1994), 56(6), 846-52
CODEN: IJCNAW; ISSN: 0020-7136
DT Journal
LA English

L5 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1994:214901 CAPLUS
DN 120:214901
TI Targeting of T lymphocytes against EGF-receptor+ tumor cells by **bispecific** monoclonal **antibodies**: requirement of CD3 **molecule** crosslinking for T-cell activation
AU Ferrini, Silvano; Cambiaggi, Anna; Sforzini, Sabrina; Marciano, Sabrina; Canevari, Silvana; Mezzanzanica, Delia; Colnaghi, Maria Ines; Grossi, Carlo Enrico; Moretta, Lorenzo
CS Ist. Naz. Ric. Cancro, Genoa, Italy
SO Int. J. Cancer (1993), 55(6), 931-7
CODEN: IJCNAW; ISSN: 0020-7136
DT Journal
LA English

L5 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1993:167190 CAPLUS
DN 118:167190
TI Development of humanized **bispecific antibodies** reactive with cytotoxic lymphocytes and tumor cells overexpressing the HER2 protooncogene
AU Shalaby, M. Refaat; Shepard, H. Michael; Presta, Len; Rodrigues, Maria L.; Beverley, Peter C. L.; Feldmann, Marc; Carter, Paul

CS Dep. Cell Biol., Genentech, Inc., South San Francisco, CA, 94080, USA
SO J. Exp. Med. (1992), 175(1), 217-25
CODEN: JEMEAV; ISSN: 0022-1007
DT Journal
LA English

L5 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1993:145294 CAPLUS
DN 118:145294
TI Possible targets on carcinoma for bMAb retargeting of lymphocyte or drug cytotoxicity
AU Canevari, Silvana; Mezzanzanica, Delia; Menard, Sylvie; Ferrini, Silvano; Moretta, Lorenzo; Colnaghi, Maria Ines
CS Ist. Naz. Tumori, Milan, I-20133, Italy
SO Int. J. Cancer, Suppl. (1992), 7(Bispecific Antibodies Targeted Cell Cytotoxic.), 42-4
CODEN: IJSUEZ; ISSN: 0898-6924
DT Journal; General Review
LA English

L5 ANSWER 12 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1993:95207 CAPLUS
DN 118:95207
TI The efficiency of cell targeting by recombinant retroviruses depends on the nature of the receptor and the composition of the artificial cell-virus linker
AU Etienne-Julan, Maryse; Roux, Pierre; Carillo, Serge; Jeanteur, Philippe; Piechaczyk, Marc
CS Lab. Biol. Mol., Univ. Montpellier II Sci. Tech. Languedoc, Montpellier, 34095, Fr.
SO J. Gen. Virol. (1992), 73(12), 3251-5
CODEN: JGVIAY; ISSN: 0022-1317
DT Journal
LA English

L5 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2002 ACS
AN 1991:205190 CAPLUS
DN 114:205190
TI Two distinct monoclonal **antibodies** raised against mouse .beta. nerve **growth factor**. Generation of bi-specific anti-nerve **growth factor** anti-horseradish peroxidase **antibodies** for use in a homogeneous enzyme immunoassay
AU Kenigsberg, Rhoda L.; Elliott, Peter J.; Cuello, A. Claudio
CS Dep. Pharm. Ther., McGill Univ., Montreal, PQ, H3G 1Y6, Can.
SO J. Immunol. Methods (1991), 136(2), 247-57
CODEN: JIMMBG; ISSN: 0022-1759
DT Journal
LA English

L5 ANSWER 14 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 94274773 EMBASE
DN 1994274773
TI Induction of tumour cell lysis by a **bispecific antibody** recognising epidermal **growth factor** receptor (EGFR) and CD3.
AU Knuth A.; Bernhard H.; Jager E.; Wolfel T.; Karbach J.; Jaggle C.; Strittmatter W.; Meyer zum Buschenfelde K.-H.
CS II Medizinische Klinik, Hamatologie/Onkologie, Krankenhaus Nordwest, Steinbacher Hohl 2-26,D-60488 Frankfurt a. Main, Germany
SO European Journal of Cancer Part A: General Topics, (1994) 30/8 (1103-1107).
ISSN: 0959-8049 CODEN: EJCTEA
CY United Kingdom
DT Journal; Article

FS 016 Cancer
026 Immunology, Serology and Transplantation
LA English
SL English

L5 ANSWER 15 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 94236664 EMBASE
DN 1994236664
TI Pharmacological modulation of peptide **growth factor** receptor expression on tumor cells as a basis for cancer therapy.
AU Tagliaferri P.; Caraglia M.; Muraro R.; Pinto A.; Budillon A.; Zagonel V.; Bianco A.R.
CS Cattedra di Oncologia Medica, Facolta di Medicina, Universita 'Federico II' di Napoli, via S Pansini 5,80131 Naples, Italy
SO Anti-Cancer Drugs, (1994) 5/4 (379-393).
ISSN: 0959-4973 CODEN: ANTDEV
CY United Kingdom
DT Journal; General Review
FS 016 Cancer
026 Immunology, Serology and Transplantation
030 Pharmacology
037 Drug Literature Index
LA English
SL English

L5 ANSWER 16 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 94011887 EMBASE
DN 1994011887
TI Targeting of T lymphocytes against EGF-receptor+ tumor cells by **bispecific** monoclonal **antibodies**: Requirement of CD3 **molecule** cross-linking for T-cell activation.
AU Ferrini S.; Cambiaggi A.; Sforzini S.; Marciano S.; Canevari S.; Mezzanzanica D.; Colnaghi M.I.; Grossi C.E.; Moretta L.
CS Ist. Naz. per la Ricerca sul Cancro, V.le Benedetto XV 10,16132 Genoa, Italy
SO International Journal of Cancer, (1993) 55/6 (931-937).
ISSN: 0020-7136 CODEN: IJCNAW
CY United States
DT Journal; Article
FS 016 Cancer
026 Immunology, Serology and Transplantation
LA English
SL English

L5 ANSWER 17 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 93014179 EMBASE
DN 1993014179
TI The efficiency of cell targeting by recombinant retroviruses depends on the nature of the receptor and the composition of the artificial cell-virus linker.
AU Etienne-Julan M.; Roux P.; Carillo S.; Jeanteur P.; Piechaczyk M.
CS Laboratoire de Biologie Moleculaire, URA CNRS 1191 Genetique Moleculaire, Universite Montpellier II, Place E Bataillon,34095 Montpellier Cedex 05, France
SO Journal of General Virology, (1992) 73/12 (3251-3255).
ISSN: 0022-1317 CODEN: JGVIAY
CY United Kingdom
DT Journal; Article
FS 004 Microbiology
LA English
SL English

L5 ANSWER 18 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 92358961 EMBASE

DN 1992358961
TI Possible targets on carcinoma for bMAb retargeting of lymphocyte or drug cytotoxicity.
AU Canevari S.; Mezzanzanica D.; Menard S.; Ferrini S.; Moretta L.; Colnaghi M.I.
CS Oncologia Sperimentale E, Istituto Nazionale Tumori, Via Venezian 1,I-20133, Italy
SO International Journal of Cancer, (1992) -/SUPPL. 7 (42-44).
ISSN: 0020-7136 CODEN: IJCNAW
CY United States
DT Journal; Conference Article
FS 016 Cancer
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English

L5 ANSWER 19 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 92321497 EMBASE
DN 1992321497
TI Biology and therapy with biologic agents in gynecologic cancer.
AU Wiener J.R.; Berchuck A.; Bast Jr. R.C.
CS Department of Obstetrics/Gynecology, Department of Surgery, Box 3843,Durham, NC 27710, United States
SO Current Opinion in Oncology, (1992) 4/5 (946-954).
ISSN: 1040-8746 CODEN: CUOOE8
CY United States
DT Journal; General Review
FS 010 Obstetrics and Gynecology
016 Cancer
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English

L5 ANSWER 20 OF 35 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 92021180 EMBASE
DN 1992021180
TI Development of humanized **bispecific antibodies** reactive with cytotoxic lymphocytes and tumor cells overexpressing the HER2 protooncogene.
AU Shalaby M.R.; Shepard H.M.; Presta L.; Rodrigues M.L.; Beverley P.C.L.; Feldmann M.; Carter P.
CS Department of Cell Biology, Genentech, Inc., 460 Point San Bruno Boulevard,South San Francisco, CA 94080, United States
SO Journal of Experimental Medicine, (1992) 175/1 (217-225).
ISSN: 0022-1007 CODEN: JEMEAV
CY United States
DT Journal; Article
FS 016 Cancer
022 Human Genetics
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English

L5 ANSWER 21 OF 35 CANCERLIT
AN 95383036 CANCERLIT
DN 95383036
TI Induction of tumour cell lysis by a **bispecific antibody** recognising epidermal **growth factor** receptor (EGFR) and CD3.
AU Knuth A; Bernhard H; Jager E; Wolfel T; Karbach J; Jaggle C; Strittmatter W; Meyer zum Buschenfelde K H

CS II Medizinische Klinik, Hamatologie/Onkologie, Krankenhaus Nordwest, Frankfurt a. Main, Germany.
SO EUROPEAN JOURNAL OF CANCER, (1994). 30A (8), pp. 1103-7. Journal code: ARV. ISSN: 0959-8049.
DT Journal; Article; (JOURNAL ARTICLE)
FS MEDL; L; Priority Journals; Cancer Journals
LA English
OS MEDLINE 95383036
EM 199511

L5 ANSWER 22 OF 35 CANCERLIT
AN 94699308 CANCERLIT
DN 94699308
TI Immunology and molecular biology of Hodgkin's and Reed-Sternberg cells: implications for the pathogenesis and therapeutic perspectives of Hodgkin's disease (Meeting abstract).
AU Trumper L; Daus H; Pfreundschuh M
CS Med. Univ.-Klinik I, D-6650 Homburg, Germany.
SO Non-serial, (1993). Molecular Biology of Hematopoiesis, 8th Symposium. July 9-13, 1993, Basel, Switzerland.
DT Journal; Article; (JOURNAL ARTICLE)
FS ICDB
LA English
EM 199411

L5 ANSWER 23 OF 35 CANCERLIT
AN 94075058 CANCERLIT
DN 94075058
TI Targeting of T lymphocytes against EGF-receptor+ tumor cells by **bispecific** monoclonal **antibodies**: requirement of CD3 **molecule** cross-linking for T-cell activation.
AU Ferrini S; Cambiaggi A; Sforzini S; Marciano S; Canevari S; Mezzanzanica D; Colnaghi M I; Grossi C E; Moretta L
CS Istituto Nazionale per la Ricerca sul Cancro, Genoa, Italy.
SO INTERNATIONAL JOURNAL OF CANCER, (1993). Vol. 55, No. 6, pp. 931-7. Journal code: GQU. ISSN: 0020-7136.
DT Journal; Article; (JOURNAL ARTICLE)
FS MEDL; L; Priority Journals; Cancer Journals
LA English
OS MEDLINE 94075058
EM 199402

L5 ANSWER 24 OF 35 CANCERLIT
AN 93107863 CANCERLIT
DN 93107863
TI The efficiency of cell targeting by recombinant retroviruses depends on the nature of the receptor and the composition of the artificial cell-virus linker.
AU Etienne-Julan M; Roux P; Carillo S; Jeanteur P; Piechaczyk M
CS Laboratoire de Biologie Moleculaire, URA CNRS 1191 Genetique Moleculaire, Universite Montpellier II Sciences et Techniques du Languedoc, France.
SO JOURNAL OF GENERAL VIROLOGY, (1992). Vol. 73, Pt. 12, pp. 3251-5. Journal code: I9B. ISSN: 0022-1317.
DT Journal; Article; (JOURNAL ARTICLE)
FS MEDL; L; Priority Journals; Cancer Journals
LA English
OS MEDLINE 93107863
EM 199302

L5 ANSWER 25 OF 35 CANCERLIT
AN 93090873 CANCERLIT
DN 93090873
TI Biology and therapy with biologic agents in gynecologic cancer.
AU Wiener J R; Berchuck A; Bast R C Jr

CS Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, NC 27710.
SO CURRENT OPINION IN ONCOLOGY, (1992). Vol. 4, No. 5, pp. 946-54. Journal code: A1V. ISSN: 1040-8746.
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
FS MEDL; L; Priority Journals
LA English
OS MEDLINE 93090873
EM 199302

L5 ANSWER 26 OF 35 CANCERLIT
AN 92113462 CANCERLIT
DN 92113462
TI Development of humanized **bispecific antibodies** reactive with cytotoxic lymphocytes and tumor cells overexpressing the HER2 protooncogene.
AU Shalaby M R; Shepard H M; Presta L; Rodrigues M L; Beverley P C; Feldmann M; Carter P
CS Department of Cell Biology, Genentech, Inc., South San Francisco, California 94080.
SO JOURNAL OF EXPERIMENTAL MEDICINE, (1992). Vol. 175, No. 1, pp. 217-25. Journal code: I2V. ISSN: 0022-1007.
DT Journal; Article; (JOURNAL ARTICLE)
FS MEDL; L; Priority Journals; Cancer Journals
LA English
OS MEDLINE 92113462
EM 199203

L5 ANSWER 27 OF 35 CANCERLIT
AN 91662231 CANCERLIT
DN 91662231
TI IMMUNE SYSTEM AND CANCER.
AU Anonymous
CS No affiliation given.
SO Non-serial, (1989). Immune System and Cancer. Tokyo, 1988. Hamaoka T et al, eds. Philadelphia, Taylor and Francis, 347.
DT Book; (MONOGRAPH)
FS ICDB
LA English
EM 199103

L5 ANSWER 28 OF 35 USPATFULL
AN 94:64243 USPATFULL
TI Detection and treatment of infections with immunoconjugates
IN Goldenberg, M. David, Short Hills, NJ, United States
PA Immunomedics, Morris Plains, NJ, United States (U.S. corporation)
PI US 5332567 19940726
AI US 1993-37659 19930322 (8)
RLI Continuation of Ser. No. US 1992-840591, filed on 18 Feb 1992, now abandoned which is a continuation of Ser. No. US 1989-399566, filed on 24 Aug 1989, now abandoned
DT Utility
FS Granted
LN.CNT 1460
INCL INCLM: 424/001.490
INCLS: 424/002.000; 424/009.000; 424/001.530; 424/136.100; 424/159.100; 424/164.100; 424/178.100
NCL NCLM: 424/001.490
NCLS: 424/001.530; 424/009.341; 424/136.100; 424/159.100; 424/164.100; 424/178.100
IC [5]
ICM: A61K043-00

ICS: A61K049-00; A61K039-00; G01N001-00
EXF 424/1.1; 424/2; 424/85.8; 424/9; 424/86; 424/87
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 29 OF 35 USPATFULL
AN 94:62551 USPATFULL
TI CR2 ligand compositions and methods for modulating immune cell functions
IN Lernhardt, Waldemar, Solana Beach, CA, United States
PA California Institute of Biological Research, La Jolla, CA, United States (U.S. corporation)
PI US 5331090 19940719
AI US 1989-404679 19890908 (7)
DT Utility
FS Granted
LN.CNT 1421
INCL INCLM: 530/329.000
INCLS: 530/328.000; 530/327.000
NCL NCLM: 530/329.000
NCLS: 530/327.000; 530/328.000
IC [5]
ICM: A61K037-00
ICS: A61K037-02; C07K005-00; C07K007-00
EXF 530/329; 530/328; 530/327; 530/330; 514/15; 514/16; 514/17; 514/18; 514/19
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 30 OF 35 USPATFULL
AN 94:60277 USPATFULL
TI Carbohydrate-directed cross-linking reagents
IN Ashkenazi, Avi J., San Mateo, CA, United States
Chamow, Steven M., San Mateo, CA, United States
Kogan, Timothy P., Sugar Land, TX, United States
PA Genentech, Inc., San Francisco, CA, United States (U.S. corporation)
PI US 5329028 19940712
AI US 1992-926077 19920805 (7)
DT Utility
FS Granted
LN.CNT 1001
INCL INCLM: 548/548.000
INCLS: 548/536.000; 548/547.000; 548/549.000
NCL NCLM: 548/548.000
NCLS: 548/546.000; 548/547.000; 548/549.000
IC [5]
ICM: C07D207-452
EXF 548/546; 548/547; 548/548; 548/549
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 31 OF 35 USPATFULL
AN 94:40048 USPATFULL
TI Interferon-related polypeptides as CR2 ligands and their use for modulating immune cell functions
IN Lernhardt, Waldemar, Solana Beach, CA, United States
PA California Institute of Biological Research, La Jolla, CA, United States (U.S. corporation)
PI US 5310729 19940510
AI US 1990-512118 19900420 (7)
DT Utility
FS Granted
LN.CNT 1863
INCL INCLM: 514/015.000
INCLS: 514/016.000; 530/327.000; 530/328.000
NCL NCLM: 514/015.000
NCLS: 514/016.000; 530/327.000; 530/328.000
IC [5]

ICM: A61K037-00
ICS: A61K037-02; C07K005-00; C07K007-00
EXF 514/15; 514/14; 514/16; 514/13; 514/12; 530/328; 530/327; 530/300
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 32 OF 35 USPATFULL
AN 94:5810 USPATFULL
TI Activated protein C polypeptides and anti-peptide **antibodies**, diagnostic methods and systems for inhibiting activated protein C
IN Griffin, John H., Del Mar, CA, United States
Mesters, Rolf M., La Jolla, CA, United States
PA The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)
PI US 5279956 19940118
AI US 1991-720189 19910624 (7)
DT Utility
FS Granted
LN.CNT 2944
INCL INCLM: 435/183.000
INCLS: 435/692.000; 435/090.210; 435/240.270; 436/536.000; 424/085.800; 514/012.000; 530/328.000; 530/326.000; 530/384.000; 530/380.000; 530/381.000; 530/382.000; 530/383.000; 530/389.300; 530/388.260; 530/388.250; 530/324.000; 530/412.000
NCL NCLM: 435/183.000
NCLS: 424/139.100; 424/145.100; 424/158.100; 435/069.200; 435/070.210; 436/536.000; 514/012.000; 530/300.000; 530/324.000; 530/326.000; 530/328.000; 530/381.000; 530/382.000; 530/383.000; 530/384.000; 530/387.900; 530/388.250; 530/388.260; 530/389.300; 530/412.000
IC [5]
ICM: A61K037-02
ICS: A61K039-00; C12N009-00; C07K015-00
EXF 424/85.8; 435/69.2; 435/70.21; 435/240.27; 435/536; 435/183; 514/12; 530/328; 530/326; 530/324; 530/387; 530/380; 530/381; 530/382; 530/383; 530/384; 530/389.3; 530/308.26; 530/388.25; 530/412; 436/536
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 33 OF 35 USPATFULL
AN 93:16591 USPATFULL
TI Hybrid tryptophan aporepressor containing ligand binding sites
IN Lernhardt, Waldemar, Solana Beach, CA, United States
Bourdon, Mario, San Diego, CA, United States
Youderian, Phil, Ramona, CA, United States
PA California Institute of Biological Research, La Jolla, CA, United States (U.S. corporation)
PI US 5190873 19930302
AI US 1991-720222 19910621 (7)
DT Utility
FS Granted
LN.CNT 2112
INCL INCLM: 435/177.000
INCLS: 435/069.700; 435/069.100; 530/350.000; 530/812.000; 930/250.000
NCL NCLM: 435/177.000
NCLS: 435/069.100; 435/069.700; 530/350.000; 530/812.000; 930/250.000
IC [5]
ICM: C07K013-00
ICS: C07K017-00; C07K017-02; C12P021-00
EXF 435/91; 435/69.7; 435/69.1; 435/177; 530/350; 530/812; 930/250
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 34 OF 35 USPATFULL
AN 92:102981 USPATFULL
TI Monoclonal **antibody** to novel antigen associated with human tumors
IN Hellstrom, Ingegerd, Seattle, WA, United States

Hellstrom, Karl E., Seattle, WA, United States
Marquardt, Hans, Mercer Island, WA, United States
PA Oncogen, Seattle, WA, United States (U.S. corporation)
PI US 5171665 19921215
AI US 1989-339142 19890417 (7)
DT Utility
FS Granted
LN.CNT 1173
INCL INCLM: 435/007.230
INCLS: 435/007.900; 435/172.200; 435/240.270; 436/548.000; 436/813.000; 436/064.000; 530/387.700; 530/388.800; 530/388.850
NCL NCLM: 435/007.230
NCLS: 435/007.900; 435/329.000; 435/344.100; 436/064.000; 436/548.000; 436/813.000; 530/387.700; 530/388.800; 530/388.850
IC [5]
ICM: G01N033-574
ICS: C12P021-08; C07K015-28
EXF 435/7.23; 435/172.2; 435/240.27; 435/7.9; 436/548; 436/813; 436/64; 530/387; 530/387.7; 530/388.8; 530/388.85
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 35 OF 35 USPATFULL
AN 92:61852 USPATFULL
TI Monoclonal **antibody** to novel antigen associated with human tumors
IN Hellstrom, Karl E., Seattle, WA, United States
Hellstrom, Ingegerd, Seattle, WA, United States
Marquardt, Hans, Mercer Island, WA, United States
Yoneyama, Yoshitaka, Bellevue, WA, United States
PA Oncogen Limited Partnership, Seattle, WA, United States (U.S. corporation)
PI US 5134075 19920728
AI US 1989-312640 19890217 (7)
DT Utility
FS Granted
LN.CNT 1097
INCL INCLM: 530/387.300
INCLS: 435/070.210; 435/172.200; 530/387.900; 530/828.000; 530/388.850; 530/388.150; 530/391.300
NCL NCLM: 530/387.300
NCLS: 435/070.210; 435/329.000; 435/344.100; 530/387.900; 530/388.150; 530/388.850; 530/391.300; 530/828.000
IC [5]
ICM: C12N005-00
ICS: C07K015-28
EXF 530/387; 530/828; 435/172.2; 435/240.26; 435/240.27; 435/972; 435/70.21
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>